

**Amendments to the Claims:**

1. (currently amended) A piston compressor for compression of gaseous media in a single cycle in at least two working chambers, said compressor having  
a stepped piston containing a first piston part and at least one coaxially arranged second piston part, wherein to produce stroke movements the stepped piston is drivable by way of a connecting rod system,  
a first cylinder for holding receiving the first piston part and for forming a first working chamber, and  
at least one second cylinder for holding receiving the second piston part and for forming a second working chamber,  
with the second piston part having a smaller diameter than the first piston part,  
with each of the at least two cylinders being closed by means of a plate with valve arrangements, which plate can be installed on and removed from its respective cylinder, and with the second piston part being passed through an opening in one of the plates,  
with the second piston part being arranged at one end of the first piston part with the second piston part forming the front end of the stepped piston, and  
with the second piston part forming a cylindrical working chamber, and the first piston part forming an annular working chamber .
2. (currently amended) The piston compressor as claimed in claim 1, wherein the plates are in the form of disks and bound which delimit the working chambers at the end of a respective cylinder.
3. (previously presented) The piston compressor as claimed in claim 1, wherein the plates are provided with inlet valves and outlet valves.

4. (previously presented) The piston compressor as claimed in claim 3, wherein the valves are lamellar valves.
5. (previously presented) The piston compressor as claimed in claim 3, wherein the valves are tongue valves.
6. (previously presented) The piston compressor as claimed in claim 3, wherein the valves are individual valves with spring resetting.